

THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. LXII.

THURSDAY, MAY 10, 1860.

No. 15.

PELVIC CELLULITIS.

[Read before the Boston Society for Medical Observation, April 2d, 1860, and communicated for the Boston Medical and Surgical Journal.]

BY A. D. SINCLAIR, M.D.

PELVIC cellulitis, commonly called pelvic abscess, is a disease the nature of which was known to ancient medical writers. Archigenes and Paulus Aegineta give good accounts of it. In later times its study was neglected, as we may presume from the silence which prevails upon this subject. Not that this disease was not frequently met with, but that mistaken notions existed as to its nature.

In 1844, Marchal de Calvi published the first essay on it in modern times, entitled "Intra-pelvic Phlegmonous Abscess." About the same time Drs. Doherty and Churchill, of Dublin, each wrote an essay on this subject; that of the former entitled "Chronic Inflammation of the Appendages of the Uterus after Parturition"—that of the latter, "Abscess of the Uterine Appendages." But Prof. Simpson, of Edinburgh, more than any other, has extended our knowledge on this subject, for in his earlier as well as later contributions to medical literature, he has given us very clear and comprehensive ideas on this matter. He was the first to suggest the name of pelvic cellulitis as being in accordance with the pathology of the disease; for, he says, that we might with equal correctness call pleurisy, empyema, as pelvic cellulitis, pelvic abscess. This suggestion has been acted upon by Dr. West in his excellent work, not long ago published, on the Diseases of Women, in which he gives more details upon the subject of pelvic cellulitis than are found in any other text-book of the present day.

Medical men, long ago, meeting with abscesses about the pelvis, following delivery or abortion, regarded them as secondary deposits produced by the elements of the milk circulating too freely in the blood, thus giving rise to the name of "depôts laiteaux." This

VOL. LXII.—No. 15

theory, although it was the only plausible way known to the older physicians to explain away the cause of many diseases common to the puerperal state, did not prevent, however, accurate descriptions of these being put upon record.

We now know better, in regard to this disease at least, for it may be met with in all ages and conditions, from the infant of two or three years old to the old woman of three or fourscore. That it occurs most frequently as one of the sequelæ of delivery and abortion, is not remarkable, when we take into account the nature of things—such as the large amount of pressure and strain upon the soft parts underlying and intervening between the numerous folds of the pelvic fascia. Other causes than those named have been found resulting in pelvic cellulitis; local violence, ulceration and inflammation of the uterus, disordered catamenia, and, perhaps, the taking of cold during the menstrual period. Again, cases have occurred where no exciting cause could be clearly ascertained. Primiparæ appear to be more subject to this affection than those who have borne children. This would point to the character of the labor as being the chief cause, inasmuch as in first cases it is more protracted; but on the other hand it occurs in cases where the labor was natural, and everything promised a speedy and happy recovery. Inflammation of the cellular tissue of the pelvis occurs sometimes in the male, after operations about the rectum and urethra.

Pelvic cellulitis consists in acute or subacute inflammation of the cellular tissue of the pelvis. It cannot be very accurately described, by reason of the present imperfect knowledge of the exact distribution and relations of the pelvic fascia. Descriptions of the fascia of the female pelvis in anatomical text-books, give us but meagre aid in rightly understanding the practical relations of the various folds of the fascia of the pelvis, with reference to the disease now under consideration, as well as the common disorder of uterine displacement. Our knowledge of the morbid anatomy of pelvic cellulitis will be incomplete until the pelvic fascia is studied with especial reference to diseases attacking the uterus and its appendages. In former times, vague notions existed among surgeons as to the proper treatment of hernia, and it was not until the anatomy of the abdominal fascia was thoroughly studied and described, that the knife was used with precision.

The pelvic fascia in its general distribution may be summed up as follows: One layer of fascia, which is continuous with the iliac fascia, has osseous attachment to the ilio-pectineal line, or brim of the pelvis; dips down and lines the interior of the true pelvis; then divides into two layers—the one, after forming the floor, is reflected over the broad ligament, including the ovaries and back and fundus of the uterus; the other forms a sac between the uterus and rectum and uterus and bladder.

Between the various layers of fascia there lies, densely packed,

a large amount of cellular tissue; and numerous loculations and dissepiments are the natural consequence of so many fascial adhesions and divisions. Inflammation may seize only one of the divisions of the pelvic fascia, and the effusion may confine itself to the loculament first involved, or may spread slowly or rapidly to parts adjacent. The extension of the disease into neighboring parts will depend much on the nature of its inclusions; for when the effusion is shut up between fascia and bone it can spread less readily than when it occurs between fascia and fascia, or fascia and muscle. The relation of the effusion, however, as to its exact inclusion, for reasons already given, can sometimes be but approximately determined.

Inflammatory effusion does not necessarily go on to suppuration, for in many instances, by appropriate management, resolution takes place short of this. The ordinary course of pelvic cellulitis is, in the first place, effusion of serum into the cellular tissue, which may remain unchanged for many days. Prof. Simpson relates the case of a girl, where the effusion was behind the uterus and ovary; thinking it was pus, about the tenth day from its commencement, he punctured the tumor by means of an exploring needle; pus did not appear, but a clear, limpid fluid resembling urine, which led those present to think that he had committed a great blunder and tapped the bladder, but on standing for a short time, the fluid showed itself to be coagulable serum. This occurred when the disease was always spoken of as pelvic abscess. In from one to two weeks, generally, pus is generated, but, as before remarked, the serum is absorbed in many cases, and the disease terminates before suppuration has had time to declare itself. On the other hand, neither absorption nor suppuration sets in, but as in a case related by the author already cited, and which was supposed to be cancer, the deposit was found to be one of coagulable lymph. In this last condition of things, when the lymph is deposited between fascia and fascia, but particularly between the latter and bone, the sensation of hardness which it conveys to the touch is equalled only by ligneous or osseous substances. This form of deposit is remarkably slow in its course, and may take months, nay years, before it breaks up and discharges. The effusion sometimes increases very rapidly, rising high up into the abdomen in a few days. When the disease has progressed until a true pelvic abscess has formed, the latter tends to relieve itself of the pent up matter in various ways, depending in a great measure on the extent of the abscess, and its relation to external parts. When the abscess is confined to the true pelvis, it is disposed to open into the vagina, rectum, uterus or bladder; when above the brim of the pelvis, the tendency is to discharge itself on the iliac or inguinal surface. A collection of pus is sometimes found upon the hip, or near the rectum, caused and originated by the escape of matter from the pelvis through the sacro-ischiatic notch. Prof.

Simpson relates cases where abscesses burst consecutively into two viscera, forming vesico-uterine, vesico-intestinal, and utero-intestinal fistulæ. It is very remarkable, how rarely these abscesses open into the cavity of the peritoneum. This fortunate fact, Cruveilhier says, is accounted for by the intervention of a layer of fascia, which prevents the discharge of matter in that direction. The existence of Cruveilhier's layer of fascia, however, is denied by some; but be that as it may, the fact substantiating the rarity of abscess pointing and discharging into the peritoneal cavity still remains unchanged.

The shape of the tumor is governed by its situation, and the folds of fascia which include it. Effusion most frequently takes place between the folds of the broad ligament, expanding the latter, and being bound down to the pelvis and uterus, and loose in the centre, assumes a bulging outline exceedingly hard to the touch. This state of things may simulate tumor of the ovary, but as no tumor of this organ is adherent to the pelvis, there is little liability to error. The disease may confine itself entirely to one side of the pelvis, but sometimes it passes down to the cervix uteri, assuming the feel of a carcinomatous affection, passes over to the opposite side, and there gives rise to a fresh abscess. It may and often does originate between the uterus and rectum, and uterus and bladder, or entirely above the brim, the infiltration pushing up the peritoneum before it. Prof. Simpson speaks of cases where sloughing of the cellular tissue of the pelvis took place, caused by compression of the vessels by the effused serum or lymph. The uterus, as may be inferred from the nature of the disease, is often found displaced, the displacement depending upon and being influenced by the extent and position of the disturbing cause.

The symptoms of pelvic cellulitis are partly local and partly constitutional. Dull pain and a throbbing sensation are complained of in the pelvis, and there is great tenderness on pressure over the lower portion of the abdomen. The effusion, by pressing upon adjacent viscera and nerves, gives rise to the most characteristic symptoms of the disease, namely, dysuria and painful defecation; the former from pressure on the bladder, the latter from pressure on the rectum. Pains of a neuralgic character are frequently complained of, shooting down one or both lower extremities and simulating sciatica. On passing the finger into the vagina, severe pain is caused by pressure on the tumefied portion, and the temperature of the canal is much elevated. When an attack comes on immediately after delivery, the lochial discharge is nearly if not entirely suppressed. The constitutional disturbance is characterized by the usual symptoms of fever; dry and hot skin, quick pulse and restlessness. This fever lasts for several days, and may subside spontaneously. It belongs to the primary stage, before suppuration has commenced in the pelvic effusion. In the second stage, or that of the formation of abscess, the character of the fe-

ver is modified; it assumes the hectic type—worse in the afternoon and evening. When much constitutional irritation exists, the patient has the appearance of one in advanced consumption, so emaciated and prostrated does she become; but there is this difference, that associated with the chill and hectic of this disease, there is absence of cough, a symptom invariably present in phthisis.

At the commencement of the disease, on account of the vagueness of symptoms, its presence may be overlooked; this too, especially after delivery, as some tenderness about the abdomen is not unusual; but after a few days, there is no difficulty in ascertaining the nature of the affection, if due examination is made, and the symptoms, local and constitutional, properly considered. Pelvic examination ought to be conducted with both hands; the index finger of the one in the vagina, while the other hand is used externally. In this way the swelling, when situated in the broad ligament, or between the uterus and bladder, can be embraced between the fingers, and its size very nearly appreciated. These swellings are very hard to the touch, and irregular, generally, in their outline, and cause much pain upon pressure. The effusion may extend itself in different directions, according to its amount; and this, with its immobility, is a most valuable guide in deciding as to the nature of the disease, for in no other affection does a similar state of things exist. Tumefaction may be felt anterior or posterior to the neck of the uterus, or in the septum between the vagina and rectum. According to the amount of effusion, the uterus may be found fixed or considerably displaced, and access to the os attended with much pain and difficulty, while the vagina, from the extension downwards of the swelling, may be much encroached upon. When the tumor occupies the space between the uterus and rectum, or recto-vaginal septum, external examination would fail in detecting it; hence the necessity of vaginal examination in a case of suspected pelvic inflammation. Should there be doubt as to the nature of the tumor, recourse may be had to the exploring needle, a very safe and reliable agent in resolving the difficulty. If there be feeling of fluctuation in any accessible portion of the tumor, there let the puncture be made. As sometimes pus does not flow along the canula, it is best in all cases, where matter does not appear upon puncture, to apply suction, and then to blow through the tube. A single drop of pus, thus obtained, may throw light upon an obscure affection. The microscope will also aid us, if doubt remains as to the nature of the matter obtained through the exploring needle.

Pelvic hæmatoma, or blood tumor of the pelvis, might be mistaken for pelvic cellulitis, but there is a wide difference between their symptoms at the onset. Pelvic hæmatoma accompanies some menstrual derangement; comes on suddenly, without fever. There is great pain in the pelvis at the time of the effusion of blood, and the patient may faint; but from both of these she becomes

soon relieved. The constitutional disturbance is slight. The tumor is large from the first, and does not increase as in pelvic cellulitis, nor is it nearly so painful on pressure.

Although this disease, when it goes on to the formation of pelvic abscess, frequently reduces a previously strong and healthy female to the very verge of the grave, yet the number of cases resulting fatally is small, amounting, perhaps, to not more than four per cent. This is encouraging to the physician, when he has to deal with a lingering case of this disease, for in no other affection, perhaps, except phthisis, does he find such general emaciation and prostration. Reproduction does not appear to be much interfered with, for children have been borne by women who had previously suffered severely. Abortion, however, is apt to occur, in cases where the uterus contracted adhesions during the pelvic disease.

The treatment of pelvic cellulitis must vary according to the stage in which it is found. When detected in the outset, it is to be treated antiphlogistically. Leeches are to be applied to the cervix uteri or hæmorrhoidal veins. To the latter place they are very easily applied; for by placing them in a wine-glass, and inverting it against the anus, they take hold in a very little while. If the pain or throbbing do not subside after the first bleeding, it must be repeated in about twenty-four hours. Calomel and opium may be given, until the specific action of the mercury is produced. It is considered best to bring the system speedily under the influence of the mercurial by small and frequently-repeated doses. Counter-irritation by means of nitrate of silver, croton oil or ointment of tartarized antimony, may be used with much benefit. The fly blister is to be avoided, from its tending to aggravate the already too urgent dysuria. Of the counter-irritants, the blister with nitrate of silver answers the purpose better, perhaps, than any; it can be made in a few seconds, is simple and perfectly manageable. The process consists merely in passing the stick of solid nitrate of silver, moistened at the tip, a few times across the skin over-lying the seat of tenderness, and, anon, a blister follows. Warm fomentations will be found serviceable in soothing pain and allaying irritation. Should there be much fever and constitutional irritation, anodynes and febrifuges may be resorted to. The bowels are to be kept freely open by purgatives.

After the first, or acute stage has passed, and the disease has established itself, the aspect of the patient changes, and local pain subsides more or less for a time. Purulent matter is now pent up in the system, and its constitutional effects are beginning to show themselves; chill and fever in afternoons and evenings, restless nights, and general prostration. Upon examination, tenderness will be complained of, on pressure over the seat of the disease. This may be the case, where no complaint was made of the pain, previous to examination. Instead of the depletory, a supporting

plan of treatment must now be adopted. Quinine and iron, beef-tea, nutritious broths and malt liquors, are especially indicated. Poultrices, or steamed-bran fomentations, are to be constantly applied to the abdomen, and warm vaginal injections used twice or thrice daily. This course will sustain the patient's strength, hasten the discharge of the matter, and alleviate the pelvic uneasiness. Due attention must be paid to the bowels, as constipation will add very much to the sufferings of the patient. Anodyne applications may be used internally or externally if much pelvic pain is complained of. Suppositories of morphia or other anodyne substances may be passed into the vagina or rectum; to be prepared after the manner recommended by Prof. Simpson—with wax, lard, &c.; they melt at the temperature of the body, and the medicinal portion is readily absorbed; not so, if the suppository is dispensed in the old way, made as if a pill.

It not unfrequently becomes a serious question as to whether the abscess is to be left to burst of itself. Experience has taught that it is best to defer surgical interference as long as circumstances will warrant, and leave it to nature to determine the place, time and mode of evacuation. Sometimes, however, it becomes absolutely necessary to make an opening, especially if the abscess be large and the walls thin, or if the matter is deep-seated, or if the constitutional disturbance threatens life. If incision of the abscess is determined upon, let the opening be made into the vagina, and not into the rectum, for in the latter there is danger of the opening becoming fistulous, and of constant irritation by fecal matter. This would prove a disagreeable complication, whereas a wound in the vagina soon heals, and obviates this probable result. The posterior cul de sac of the vagina, in most cases, is the portion recommended for incision, as there the wall is thinner and more easy of access. If the abscess can be opened externally, so much the better; but this can rarely, if ever, be done, unless the matter lies above the brim of the pelvis. Prof. Simpson recommends the tenotomy knife for this operation, or in lieu of it a bistoury, guarded to within a certain distance of the point with a piece of string or tape. But, not unfrequently, puncture has to be repeated three or four times; besides, other channels of exit are often found by the matter than that made by the knife. The general rule, therefore, is to avoid opening artificially, if possible; but if the constitutional disturbance be very severe, then the abscess must be punctured. After evacuation of matter, the parts gradually assume the natural condition, but a thickened state of the cellular tissue remains for a long time after all pelvic uneasiness has subsided. Sometimes sinuses—communicating with adjacent viscera, or the external surface of the body—discharging sero-purulent matter, remain after the disease has disappeared in every other respect. Prof. Simpson recommends counter-openings to be made, and the use of tincture of iodine, to be injected into the

sinuses, for the purpose of setting up adhesive inflammation in their walls. He also suggests the use of fine iron wire, with the view of bringing about the same result.

The foregoing pages claim to be but an imperfect sketch of this interesting pelvic affection, and may seem redundant at the present time, after such an excellent account of it has appeared in a foreign journal, but as notes on this subject were made previous to the publication of Prof. Simpson's lectures in the *Medical Times and Gazette*, it was thought worth while to bring them forward.

DR. ELWELL'S MEDICO-LEGAL TREATISE ON MALPRACTICE AND MEDICAL EVIDENCE.

[Concluded from p. 265.]

A MEDICAL witness is not allowed to read books on the stand. He sometimes attempts to do so, because he does not know the rule of law concerning this matter. The ground on which the rule depends, is a singular one. It is, that the presiding judge can consult authorities, or read books, as well as the physician. A question arises—does the judge do this? Has he done it? If not, then may the accused suffer not a little from such judicial negligence, involving, as it does, much ignorance where knowledge is truly power. The medical witness must study books on medical jurisprudence. He must attend lectures about it, as a branch of his professional education. He goes into court prepared by knowledge for his great office; and if he have it not, he meets its sure consequences. He may and must use such knowledge. Books should serve only to confirm, what his memory allows him to declare.

Another important matter for the physician in court. He may, on the stand, consult the notes he has taken of the case, concerning post-mortem appearances, chemical analyses, quantities, numbers, &c. He may do this under the rule, "*to refresh his memory*," but not to get *information*. Is there not the same analogy between what we have read and about which we have deeply thought, as between notes and their use on the stand? We do not mean in these questions to attempt the vain office of altering judicial rules, but to state to the medical witness what he *may* and what he *may not* do.

There are other annoyances in court which have their source and character in those who are more or less concerned in the administration of public justice. We have had but little experience here, but we have seen the effects of court ethics upon others. We recal an instance, but it was one which can hardly be repeated. A person was indicted for two capital felonies, alleged to have been committed in the same place, and at the same time, viz., murder and arson. We were summoned for the defence in

both trials. The verdict was for the accused upon the first. The second trial soon came on. Upon our cross-examination, we observed the District Attorney had a small book in his hand—a green-covered book—from which he read during the whole of our examination. As soon as we left the stand, we took a seat next to the attorney, and asked him what book it was which he read so attentively during our examination. He said it was an old interleaved Massachusetts Register, in which he had entered all the questions put to us on the first trial, together with their answers. And he used the book to see how nearly our answers in the arson trial, corresponded with those given in that for murder. “And the result?” asked we. “Very, very, correct,” was the answer. We had not dreamed of such an use of the small, green-covered volume; and the annoyance was in an occasional self-questioning as to the book, its contents, &c. We have seen much discomfort, and even distress, produced by examinations of other witnesses, in which we have been an associated witness, and in which it has been our sincere pleasure to find the court interfering to protect the witness, and to let the offending counsel know what the court thought of his conduct, and to give him a lesson on the duties of adverse lawyers in obtaining testimony for, or against, him, or her, on whose behalf he had been employed.

In a trial for adultery, a middle-aged woman—a Swede, of very prepossessing appearance—took the stand for the defence. She testified to an occurrence on the day in which the crime was alleged to have been committed, which occurrence proved that the accused could not have been where he could have committed it—in other words, an *alibi*. It was Tuesday, the 11th of June. The circumstances which proved this statement to be true to the witness, were personal to her, and were of a character to show that her testimony was strictly correct. The testimony was exceedingly important, and the adverse counsel did all in his power to break it down.

“Why, madam, might it not have been on Monday, the 10th, that such and such things happened?” The reasons were given, in answer. “Why might it not have been on Wednesday, the 12th, instead of Tuesday, the 11th?” “You swore that it was on such an hour of Tuesday, the 11th, that you visited Mrs. ———; might it not have been at some other hour? Take time, you are on your oath.”

Thus proceeded the *question*, to the evident distress and embarrassment of this woman, a stranger to our country, its language and customs. At length the Chief was roused, and said to the counsel, in a manner perfectly courteous, but the whole meaning we all understood, “It is an ultimate fact in the mind of the witness that it was on Tuesday, when she was to visit Mrs. ———, and an ultimate fact is not a matter for explanation or reasoning.”

We remember a trial for assault and battery in which we were

a witness, as well as in the preceding one; in which the judge who tried the cause said to the counsel for the defence, that his conduct and his manner had so overcome the witness that she could say no more, and desired her to take her seat.

In a case of alleged infanticide, a witness was very hard pressed by the government, and at length, not being able to bear the rough handling any longer, said, with questionless emphasis, "Mister, you mean to make me lie, but I won't." Some of the audience let him know, in a still small voice, that they were pretty much of the same mind with the witness. This course on the part of the witness, was taking the law into one's own hands. We do not recollect that the court or the sheriff has ever interfered with such use of one's own power, or with those who expressed their approbation of its exercise.

The above case was of much interest in its medico-legal bearings. A female servant had been ailing some time, but one morning looked so much feebler than usual, that her mistress asked her if she were ill. She said "No." Her bed was examined, and found to be very bloody, and blood was traced on the stairs to the privy. This was examined, and a child was found in the vault. In the chamber was a flat-iron, the sharp angle of which was bloody, and hair found sticking to it. A coroner, informed of these facts, called a jury together, Dr. ——— being one. The infant's body being looked at—for it was not in a condition for very free, if any handling—the skull was found broken in, and the scalp much wounded. There was a rope round the neck, and the throat was cut. My friend, Dr. ———, thought these marks of violence made out so clear a case of wilful killing, that he said a *post mortem* was unnecessary. The woman was arrested, and brought to trial for child-murder.

We were summoned as an expert. The foreman of the jury was a very intelligent man, and in the course of our examination, asked if there were not such evidence furnished by the lungs and heart as would go far to prove whether the child was still-born, or was born alive. We said "Yes," and described the *docimasie pulmonaire*—pulmonary proof. The foreman understood at once that a very important point had been overlooked at the inquest. There was no proof that the child had ever lived; and hence, none that it had been *killed*. A fatal error was discovered in the indictment—the words, "being born alive," being omitted in the description of the child.

The evidence being all in, the pleadings were about to be begun, when an officer of the court came in, and begged to communicate some very important testimony from the prisoner. The usual questions were asked, as to the circumstances under which the testimony was offered, &c., and being satisfactorily answered, it was agreed by the government and the defence that the communication should be received. The officer then said that the pri-

soner had made confession that she killed the child. She was found guilty of murder, but, on account of various palliating circumstances, was sentenced to imprisonment in the common jail for life. She died not long after, of consumption. But for the confession, it is not at all probable she would have been found guilty.

This case has been introduced because of its important medico-legal teachings. Above all, does it show how important it is that in the examination of dead bodies, where a suspicion exists that the death came of violence, the utmost care should be taken that the whole evidence be forthcoming under the requirements of the criminal law.

MALPRACTICE.

We have seen the physician in court as a witness. We have now to see him in a different position—as a defendant. He is now on trial. If his first relation to jurisprudence were embarrassing, in every sense so, it is easily perceived that this new one can be almost anything but agreeable.

The question is of legal responsibility, as it affects physicians. Our author has devoted much of his work to this question; and the ability with which he has done this, gives to his volume great value, and makes him a large benefactor to the profession. Our article has already reached such a length that we have but little room for the discussion of a question of the highest importance in medical jurisprudence. We cut the following from a newspaper some time since; and it presents our subject after a manner so clear, that we offer it to our readers:—

“LEGAL RESPONSIBILITY.—Judge Minot, of Pennsylvania, has laid down the following rules of law as applicable to physicians:

“1. The medical man engages that he possesses a reasonable degree of skill, such as is ordinarily possessed by a profession generally.

“2. He engages to exercise that skill with reasonable care and diligence.

“3. He engages to exercise his best judgment, *but is not responsible for a mistake of judgment*. Beyond this, the defendant is not responsible. The patient himself must be responsible for all else; if he desires the highest degree of skill and care, he must secure it himself.

“4. It is a rule of law that a medical practitioner never insures the result.

“These are received in general as sound views, and such as will govern every enlightened court. There could scarcely be a greater absurdity, than to require physicians and surgeons to insure the result, when they can in no case control all parts of the treatment. Few serious cases are carried through a single day, and many not a single hour, without a violation of instructions, on the part of nurses and attendants.” So far the extract.

The last paragraph contains an important truth. It would have been more complete, had it stated that not only "nurses and attendants," but patients themselves, will disturb dressings, move limbs, show what they can do, as the phrase is, and abuse the surgeon for his tyranny, and then, if a bad cure is produced, sue him for damages.

Malpractice is almost exclusively charged on surgical practice. Except for medical treatment of diseases of the eye, we do not find a case of charged malpractice in the treatment of disease, distinctly so called. A case of alleged malpractice in the medical treatment of a diseased eye was tried in the October term of the Ohio Supreme Court, in 1857, which attracted much attention and occupied a long time. We make an extract or two from the charge, as it has distinct reference to medical responsibility.

Brinkerhoff J. charged the jury, "That the law did not require of the defendants eminent or extraordinary skill; that this kind of skill is possessed by few. An absolute necessity requires that the wants of a community must be supplied with the best medical knowledge its means and location will command. To require the highest degree of skill would deprive all places, except large cities, of medical men. The medical profession is as upright, as self-sacrificing and as useful as any other—none can do without their assistance in some period of life—and they are eminently entitled to protection at the hands of the court. The surgeon is not a warrantor, or a guarantor of a cure. It would be monstrous to require it at his hands; it would be alike monstrous to hold a physician liable for mistakes, if he brings to bear ordinary skill and care," &c.—Elwell, p. 162.

One other case of medical malpractice may be referred to—the case of the Commonwealth of Massachusetts v. Samuel Thomson, for the alleged murder of Ezra Lovett, by lobelia. Thomson was acquitted, on the ground that the evidence did not show malice on the part of the prisoner, or make out a case of manslaughter.

It is in surgery that malpractice has been most frequently charged; and our author has given many and various adjudicated cases in Europe and America. Surgery presents the most difficult cases for legal investigation and settlement. You may examine the most complicated machine ever presented in a patent case, and there shall not be found the least difficulty of learning concerning it any and every matter which can be in dispute. But when you come to the human, living machine, the common mind is not able to understand so much of it as to arrive at any safe conclusions in the midst of the conflicting assertions and opinions of professional men. We know few more unprofitable and melancholy sights than are presented in courts of justice in the collisions, the quarrels of surgical witnesses. The very fact that both theoretical and practical views should so strongly militate—that a demonstrative science should be, and is, subjected to the same varieties

and oppositions of opinion as are the most obscure matters in intellectual philosophy, makes a case for the popular, common mind, which it cannot compass—about which it literally proves nothing, and about which it can be taught nothing. We remember, and never can forget, a charge to a jury in a case of surgical malpractice, which was the wisest one which has come within our reading. The presiding judge was held in very sincere and high respect by his brethren and the public. We quote from memory.

"We have been many days on this trial; we have had many surgical witnesses—experts. We have had anatomy, and physiology, and pathology, and surgery. My knowledge of these is slight. In anatomy, I know but little if anything beyond what is contained in an old book, which doubtless you, gentlemen of the jury, have often read: **WE ARE FEARFULLY AND WONDERFULLY MADE.**"

We remember a case which made a good deal of noise in the time of it, and in which the counsel for the plaintiff declared his ignorance of the whole matter by attempted witticism. The case was dislocation of the hip-joint. A very distinguished teacher of anatomy, who was also an highly esteemed surgeon, was summoned, and described the various directions which dislocated hip might take. The counsel for the plaintiff—a young man—did all he could to break down, and so destroy the influence of this witness; and in the course of his argument, stated, in amount, that he, the surgeon, had said that the dislocation was upward and downward, backward and forward, inward and outward—making a very important part of the testimony to seem ridiculous as well as impossible.

Now when we recollect what is the knowledge of a jury, taken at large, of matters of description which require great study for their apprehension, and much thought to reach their natural uses, and the disturbances which accident or violence may produce in themselves and in their relations with neighboring parts—when we take these things into account, we cannot be surprised that a jury should be influenced by the most distorted presentations of testimony, the elements of which, counsel know so imperfectly, and especially when accompanied by eloquent appeals to the sufferings and great injury which the alleged malpractice has produced. We need not argue or illustrate this matter farther. The question arises, what shall be done to remedy so glaring a defect in our jurisprudence—a defect involving so much evil to the accused, and to a profession. The law has settled this, in its benign and most just rule, that a person accused of a crime shall be tried by his peers. We have seen that the Lords of England have no equals in the state—are peerless—and therefore try themselves. Why should not the same rule of law be extended to the medical profession, which has no equal out of itself, and the members of which cannot be wisely or justly tried by any other members of a

community. No one at all acquainted with the present mode of trying cases of malpractice, can fail to have been convinced of their entire and necessary mismanagement—the witnesses being in direct conflict; and the whole balance of the apparatus of criminal jurisprudence being in utter ignorance of the nature and causes of the professional quarrel. Said a Solicitor General once to us, “If you would have ‘confusion worse confounded,’ call on different sides two or more doctors to the stand, and you will have an illustration which cannot be misunderstood.”

In both army and navy, officers are tried by their peers—by themselves. And the clergy, in every matter relating to their profession, have recourse to the same rule, and are tried by their peers. The law, of course, has the same privilege. Physicians ask for nothing more, and in no other way is it possible for them to get justice. The broken bone of a limb has been set in the best manner. Approved apparatus has been applied to keep the parts in place. The fracture is oblique. Every thing promises well. Friends get dissatisfied, and recommend their physicians, who, in their opinion, have great skill in surgery. The regular attendant is dismissed. His apparatus is removed. The newcomer knows nothing about the kind of fracture; new means are applied. The bones unite. The leg is an inch or two too short. This deformity is, of course, charged upon the first surgeon. His bill is disputed. The lame man is advised to sue for damages. He does so; and it is more than an even chance the surgeon loses his case, and with it his bill, and has damages and costs on his shoulders to boot. We have actually been told that in a certain county, of a certain State, the jury in all suits for malpractice give their verdict for the plaintiff; and that same county, it is said, tries more of such cases than all the others of the *Commonwealth* put together. It may be questioned if that expressive word for State is not unhappily applied to such a community. Woe to that surgeon who has in charge an accident in that county. The common victualler must have bed and board for the traveller, or forfeit his license. The surgeon of — county must have all skill, and all apparatus, for all sorts of fractures, &c. But the all and the best will avail him not, if a Haman be “round.” His first fracture will be fatal to him. The jury care not a fig what bone is “broke,” or how, or how treated. They know that the *defendant* is not the *plaintiff*, and that sufficeth.

We have finished our work, and unconsciously have spread it over more ground than we dreamed of when it was begun. It contains reminiscences of cases adjudicated, most of them many, many years ago, but as fresh in memory as if of yesterday. There may be an interest in the records of actual observation and experience which other abstracts may want. The experiment at least seemed worth making, and the time taken for the effort may not have been wasted if our object be obtained.

We heartily commend Dr. Elwell's work to our readers. It is from one who knows well what his profession wants in such a work; and in our judgment he has met and satisfied the demand.

NOTE.—At page 300, it is said that books are not allowed to be read from by the witness. He is not allowed to refer to, or quote them. In a trial in which we were a witness, somnambulism was in the defence. In Elliotson—doubtless from the State Trials—the case is given of a somnambulist, the brother of a nobleman, who rose one night and went to the horseguards and fatally shot one when on duty. He was tried for murder, and was acquitted on the ground that he had done the deed during somnambulism. We were not allowed to state this case.

In a trial for matricide, by a little girl 12 or 13 years old, whose mother was a confirmed drunkard, and who had wholly neglected her child, moral insanity was advanced in the defence. It was rejected, and among other reasons because in a late London Law Reporter the plea of moral insanity had been ruled out. Now why was the prosecuting attorney allowed to make this quotation, and a professional witness forbidden to refer to a case exactly in point in the somnambulist case? It was from a law book the attorney had quoted. And it was from the same we proposed to give a case, viz., from the State Trials. We recollect that there was a question of the justice of the ruling in the two cases; in other words, if the government had any better right to the kind of testimony involved than the defence. A million of people were trying that poor, ignorant, most wretched, helpless child; for in a legal sense that same child might murder each and all of that million. Had not she as perfect and as legal a right to the same defences as had the endangered million?

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, MAY 10, 1860.

MASSACHUSETTS GENERAL HOSPITAL.—From the annual report of this Institution, which we have received, it appears that during the year 1859 there were admitted to the Hospital 1240 patients (776 males, and 464 females). Of this number, 653 were discharged well, 128 much relieved, 152 relieved, 54 not relieved, and 141 died.

It will be observed, says the report, that the number of patients admitted was larger than in any previous year (being 225 in excess of 1858), and yet at no time were all the beds occupied, nor was any proper applicant refused admission.

The trustees speak of the new system adopted in 1858, as having resulted very satisfactorily, and express their sense of the admirable order and efficiency which have marked the government of the estab-

lishment, under the guidance and supervision of the Resident Physician, Dr. Shaw.

In connection with this report, is that of the Superintendent of the McLean Asylum for the Insane, Dr. John E. Tyler. Since the last annual report, it appears that 131 persons have been received into this institution, and that the aids of the Asylum have been extended during the year to 317 patients. Among these are persons of every age and rank of society, and exhibiting almost every phase of mental disease.

Dr. Tyler's report, we have only space to say, is marked by ability and much sound practical sense. In his excellent observations on the treatment of this class of maladies, he alludes to a point which cannot be too strongly insisted upon—that of the necessity of the early removal of the patient from the presence of familiar scenes to the more quiet abode of an asylum, away from the associations of its origin, and where he can have all the benefit of regular medical treatment, and, at the same time, is free from the dangers to which the insane are peculiarly liable. In answer to a very natural objection arising from the idea of disgrace with which, in many minds, mental alienation is too apt to be associated, Dr. T. very justly remarks that insanity is a disease to be dreaded and provided against, but “no more a thing to be ashamed of than a fever or a fracture.”

With regard to the nature and causes of insanity, Dr. Tyler speaks of the latter as no longer to be considered owing to mere *functional* disturbance, but rather to *organic* changes in the brain itself. The fact that no morbid change is discovered after death in an organ whose functions have been imperfect in life, by no means proves the absence of such organic change. Dr. T. says:—

“Great advances have been made within the last few years in physiological and pathological science, and ‘many diseases, such as the fatty degeneration of the heart, and the epithelial desquamation of the ducts of the kidney, which but a little while ago were called functional because no morbid change could be discovered, are now by the aid of the microscope proved to be structural,’ and it is probable that the perfection of the science of observation will reveal the same fact in all diseases which are now called functional to conceal our ignorance of their real nature and cause.”

He regards insanity, then, as a physical disease, and to a great extent amenable to medicine, as curable in its earlier stages, and under favorable circumstances for treatment, as any one in the nosological list.

Among the causes of insanity alluded to which may be more readily guarded against, are those arising from the neglect with which apparently slight physical disorders are treated, more especially derangements of the stomach and liver:—

“Many a person is morose, peevish, or depressed, a trouble to himself and his family, from an inactive stomach, a sluggish liver, or neglected bowels. Many a lawyer who has been looking despairingly at the difficulties of a case before him, and his prospects of a verdict, will courageously ‘beard the lion,’ after the result of a single prescription. Many a merchant sees his anxieties and forebodings vanish before the potency of a blue pill; and many a clergyman who desponds at the meagre result of his labors, and fears that he has mistaken his calling, is quickened by an energetic horseback ride, to work with the faith and hope of an apostle. These little ailments—a cold, a rheumatism, an indigestion—curable enough in their inception, by simple means intelligently directed—become grave by ill management or neglect, and more seriously implicate the brain, even to the production of insanity.”

Dr. T. also refers to a form of insanity which has appeared within a few years in this community, and with rapidly increasing frequency, commonly known as "softening of the brain":—

"Professional, but more frequently business men, are its subjects. The predisposing cause is sumptuous living. After a morning fully occupied with business matters, a man comes regularly to a dinner of various and highly-seasoned dishes of fish and fowl and flesh, with every adjunct to excite and gratify the appetite. He partakes freely of food and wine, in excess to be sure, though perhaps never to the extent of gluttony or inebriety. The papers are read, cigars are smoked, a few hours are passed socially, and the evening closes with a hot supper and abundant punch. If a man living thus continues successful in his plans and his business, he may go through life with no other physical or mental infirmity than the pain and irascibility of gout or the distress and gloom of dyspepsia. But if it be otherwise, if he meet with a reverse of fortune, or if some grief or chagrin come upon him, then he is exceedingly liable to this fatal disease, which is the joint product of luxurious living and some torturing anxiety or disappointment."

We would say, in conclusion, that Dr. Tyler's report fully sustains the Trustees in the opinion expressed by them, that the Superintendent, "with eminent professional qualifications, combines marked devotedness to the responsibilities he has assumed."

BOSTON MEDICAL ASSOCIATION.—The annual meeting of this Association was held at No. 12 Temple Place, on Monday, May 7th, 1860. Dr. J. Mason Warren was chosen Chairman.

The following gentlemen were chosen members of the Standing Committee for the ensuing year:—Drs. Nathaniel B. Shurtleff, Silas Durkee, William J. Dale, J. Mason Warren, George Hayward, Jr. Dr. John B. Alley was re-elected Secretary.

The following gentlemen have become members since the last annual meeting: Drs. John C. Dalton, Marcus B. Leonard, B. Joy Jeffries, Gustavus Hay, Carl Both, John Stearns, Jr.

The Secretary read the Annual Report, and the following sketch of the formation and progress of the Association:—

The Boston Medical Association was founded in 1806, by thirty physicians then resident in the city. No record of the primary meeting exists. The first annual meeting was held at Vila's, on the first Wednesday in March, 1807. Dr. Thomas Welch was chosen Chairman. A Committee consisting of three members, viz., Drs. John Warren, Lemuel Hayward, and John Fleet, the first Secretary of the Association, was appointed to prepare a code of Medical Police, and report at the next annual meeting.

The second annual meeting was held at Vila's, on the first Wednesday of March, 1808. Dr. John Warren was chosen Chairman. The Committee appointed to prepare a code of Medical Police, reported a draft, which was recommended with instructions to print five hundred copies for distribution, and the following vote was adopted:—"That the thanks of the Association be presented to the Standing Committee for their copious and useful Report."

This code, remarkable for the conciseness, simplicity and purity of its style, remains unaltered to the present day, and for more than half a century has exerted a highly favorable influence upon the members in their professional intercourse, and has contributed much towards elevating the standard of medical attainments and increased the respect for the profession in the public estimation.

The annual meetings for the next ten years are devoid of any matters of general interest. A special meeting of the Association was held March 20, 1811, to receive and act upon a report of a Committee appointed at the annual meeting, to arrange for the general vaccination of the citizens of Boston, and it was voted, "to reduce the fee for the space of three months, and that the hour from 7 to 8,

A.M., be devoted to the gratuitous vaccination at the physicians' houses, and every patient be requested to call at the end of the fifth, seventh, ninth and eleventh day."

Five years later, the smallpox prevailing to some extent, the Board of Health submitted to the Association a plan for general vaccination. A special meeting was held on the 28th May, 1816, and it was unanimously voted that the members of the Association cordially approve of the general plan of the Board of Health, and will freely coöperate with them in their laudable undertaking. It was also voted that the regulation respecting the fee for vaccination shall be dispensed with for three months, and that all the members of the Association vaccinate the poor gratuitously.

At the annual meeting held March 1, 1820, it was voted to hold an adjourned meeting for the purpose of revising the By-laws. The meeting was held, and after the acceptance of the report of the Committee, it was voted to hold the next meeting of the Association on the first Monday of May, 1823. A special meeting was held December 15, 1820, to consider if any measures were necessary to prevent the irregular practice of midwifery, and the subject was referred to a Committee.

At the triennial meeting, held on the first Monday of May, 1823, a Committee was appointed to consider the expediency of restoring the annual meeting of the Association. Said Committee reported, at an adjourned meeting held May 19, 1823, in favor of the restoration of the annual meeting, and the recommendation was adopted.

In 1824, an attempt was made to restore the annual dinner, which had been discontinued for some years, and a proposition was offered to establish an entrance fee of five dollars, and an annual assessment of two dollars. This plan was not adopted, but the Association voted to restore the annual dinner, with the proviso "that no member should be assessed for the dinner who should give notice to the Secretary in writing, at least one week before the meeting, that it was not his intention to dine with the Association."

At the annual meeting in 1825, the ordinary business was transacted, and sixteen members sat down to dinner.

In 1828, on motion of Dr. Enoch Hale, a Committee was appointed to consider the practicability and expediency of effecting some arrangement with the apothecaries so as to secure a more able and faithful execution of physicians' prescriptions.

A special meeting of the Association was held on March 29, 1829, for the purpose of expressing a sense of the public and private loss sustained in the death of Dr. John Gorham. Appropriate resolutions were offered by Dr. John Ware, and unanimously adopted. Dr. James Jackson was requested to deliver an address on the occasion of his funeral.

At a special meeting, held a few days subsequently, on motion of Dr. George Hayward, it was voted, "that the Secretary be directed to present the thanks of the Association to Dr. Jackson for his very interesting and appropriate eulogy on the late Dr. Gorham, and to request a copy of the same for the press."

At a special meeting held April 16th, 1830, a proposition was made to substitute a supper for the annual dinner, but after some discussion it was withdrawn.

At the annual meeting in 1830, the committee appointed to confer with the apothecaries, made a report, and offered the following resolution, which was adopted:—"Resolved, that the Association regard with much satisfaction the establishment and exertions of the Massachusetts College of Pharmacy, believing that the results will be highly useful to the medical profession and to the public generally, as well as beneficial to the members of the College."

The same year the dinner was discontinued, and quarterly social meetings were held at the houses of physicians, until Jan. 11, 1839, when it was decided to discontinue them.

A special meeting was held Dec. 10, 1830, to request the city authorities to consider the subject of a general vaccination, and a committee of five was appointed to report measures of a permanent character to insure vaccination, and a committee of nineteen members was appointed to vaccinate gratuitously all persons designated by the Mayor or other city officers as proper subjects. The offer was gratefully acknowledged by the city authorities, and it was voted, by the

FACSIMILE OF AUTOGRAPHS

OF THE

ORIGINAL MEMBERS OF THE BOSTON MEDICAL ASSOCIATION.

James Lloyd	Thos. Danforth
Samuel Danforth	Asa Bullard
Isaac Rand	John G. Coffin
John Jeffries	Jacob Gates
Charles Jarvis	John Dixwell
Lin. Hayward	James Jackson
Thos. Kest	Ben. Shurtleff
John Warren	Whipple Howard
Thomas Wilsh	J. Warren
A. Dexter	Cyrus Perkins
W ^m Spooner	Horace Bean
Isaac Rand Jr	John Garham
John Fleet Jr	William Gannett
William Ingalls	John Kendall -
	D. Parker

Board of Aldermen, "that the Board will cheerfully co-operate with the Medical Association, in giving effect to their benevolent project of securing the advantages of vaccination to those whose circumstances preclude them from paying the expense of the operation."

On the 16th of December, the committee appointed at the last meeting reported a draft of a memorial addressed to the city authorities, recommending the enjoining upon all physicians to urge the necessity of vaccination, and that each physician keep a record of all children born under his care, and vaccinate each one within six months from the birth of each child; the establishment of an office for the gratuitous vaccination of the poor, under the direction of the City Physician, and the abandonment of the plan of sending patients affected with smallpox across the water in the cold season of the year, which recommendations were adopted by the authorities.

At a special meeting, held June 25, 1832, the Association, contemplating the possibility of the cholera visiting the city, on motion of Dr. Jacob Bigelow, voted, unanimously, "that they will at all times co-operate with the city authorities in judicious measures for the promotion of public security, and will render prompt and gratuitous services to the poor, will endeavor to give efficacy to public and private charities, and will render, to the best of their belief, a true and frank account of the state and progress of the disease." The resolutions were accompanied with many valuable suggestions, as to hygienic treatment, and were admirably calculated to allay the fears which the prospect of the advent of so terrific a disease would naturally arouse.

On the 7th of August, 1832, the subject of bills of mortality was ably reported upon by a committee appointed for that purpose, and a suitable nomenclature was adopted.

At a special meeting held on the 14th of November, 1832, resolutions, expressive of the great loss which this country had sustained in the death of Dr. G. F. Spurzheim, were offered by Dr. John C. Warren, and unanimously adopted.

At the annual meeting in 1835, the attention of the Association was called, by Dr. John Ware, to the subject of introducing pure water into the city, and it was voted that a committee of five be appointed to consider the expediency of stating to the city government, the opinion of the Association, that the introduction of pure water would be a measure highly conducive to the future benefit of the city, with power to make the statement either in the form of a petition or otherwise, should they think proper to do so. At the next annual meeting, the committee reported that they had presented a petition on the subject to the city government, signed by all the members of the Association. The remarkable degree of health with which the city has been favored during the twelve years since the introduction of pure water, and the great diminution of all diseases caused by imperfect sewerage, prove the wisdom of the suggestion.

Since 1836, the proceedings of the annual meetings consist mostly of the ordinary business, viz., the election of officers and reports of the Secretary. The formation of the Suffolk District Medical Society has drawn away the attention of members from the objects of the Association, and some have even suggested its discontinuance, but it should be remembered that the two organizations differ very materially in their objects. The Boston Medical Association is an independent organization, expressly designed to regulate the intercourse of members with each other, and to provide a suitable fee table which it shall be deemed a point of honor to adhere to. No one can reasonably doubt the advantages of such an Association. Its influence on individual members, its active co-operation with the city authorities in times of epidemics, and the general interest which its members have exhibited in the promotion of the hygienic condition of the city, have been productive of much good. The District Medical Society is not an independent organization. It is part of a great Society which extends over the State. Its object is to promote the general interest of medical science by meetings for medical improvement and the dissemination of medical literature. It cannot bind its members to the use of a fee table. The one is part of an incorporated Society, bestowing certain honors and privileges upon its members; the other is simply an Association of medical men, who approve of certain regulations, and agree upon their honor to comply with them. Of the thirty original members of the Association, but one individual remains. May he long be spared

to adorn the profession to which he has devoted nearly sixty years of constant activity. "Serus in cælum redeat."

Through the kindness of Dr. J. Mason Warren, we have been furnished with an engraving, comprising a facsimile of the signatures of the original members of the Association, from which copies have been printed to accompany this report in the present number of the JOURNAL.

MESSRS. EDITORS,—The Hampden District Society, at its annual meeting, May 1, 1860, desired the Secretary to request the insertion of the following resolutions in the next issue of the Boston Medical and Surgical Journal:—

"Resolved, That in the death of Dr. Jesse W. Rice, of Wilbraham, the medical profession of Hampden County has lost an honored member—a man whose education and long experience, and rectitude of character, had procured for him a position of great usefulness.

"Resolved, That the members of the Hampden District Medical Society tender their warm sympathies to the family of their deceased brother in this their heavy affliction."

Dr. Rice (a retired member of the Massachusetts Medical Society since 1856) suffered for the past year from repeated attacks of pulmonary hæmorrhage, in one of which he succumbed, March 2, 1860.

GEO. A. OTIS, JR., *Dist. Sec'y.*

MESSRS. EDITORS,—In the case of tracheotomy reported by me to the Society for Medical Improvement, and published in the last number of the JOURNAL, I omitted to state that the opening to the tube was covered with a piece of muslin, which was kept constantly wet by applying a camel's hair pencil dipped in water of about the temperature of the room.

G. H., JR.

Boston, May 8, 1860.

THE annual commencement exercises of the Philadelphia College of Pharmacy were held on the 11th of March. The list of graduates numbered 29, and each one received the degree of Graduate in Pharmacy.—The annual commencement of the Maryland College of Pharmacy took place March 1st, in Baltimore, and 7 young gentlemen received the diploma of the College.

VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, MAY 5th, 1860.

DEATHS.

	Males.	Females	Total
Deaths during the week,	48	50	98
Average Mortality of the corresponding weeks of the ten years, 1850-1860,	35.5	36.8	72.3
Average corrected to increased population,	82.5
Deaths of persons above 90,

Mortality from Prevailing Diseases.

Consumption.	Croup.	Scarlet Fever.	Pneumonia.	Measles.	Smallpox.
19	4	6	6	4	2

METEOROLOGY.

From Observations taken at the Cambridge Observatory.

Mean height of Barometer,	30.158	Highest point of Thermometer,	63
Highest point of Barometer,	30.310	Lowest point of Thermometer,	30
Lowest point of Barometer,	29.936	General direction of Wind,	N. E.
Mean Temperature,	43.53	Whole am't of Rain in the week	0.000 in.

PAMPHLETS RECEIVED.—Notes on Nursing; What it is and what it is not. By Florence Nightingale. (From Wm. Carter, Boston.)

Deaths in Boston for the week ending Saturday noon, May 5th, 98. Males, 48—Females, 50.—Abscess, 1—asthma, 1—inflammation of the bowels, 1—congestion of the brain, 1—disease of the brain, 1—bronchitis, 1—cancer (in throat), 1—consumption, 19—convulsions, 3—cholera infantum, 1—croup, 4—diphtheria, 1—dropsy, 2—dropsy in the head 5—drowned, 1—debility, 1—dysentery, 1—infantile diseases, 3—erysipelas, 1—bilious fever, 1—scarlet fever, 7—typhoid fever, 1—gangrene (of the lungs), 1—gastritis, 1—disease of the heart, 2—inflammation, 1—intemperance, 2—disease of the kidneys, 1—disease of the liver, 1—congestion of the lungs, 2—disease of the lungs, 2—inflammation of the lungs, 6—measles, 4—necrosis, 2—palsy, 1—pleurisy, 2—rheumatism, 1—smallpox, 2—suicide, 1—teething, 1—tumor, 1—unknown, 6.

Under 5 years, 47—between 5 and 20 years, 10—between 20 and 40 years, 17—between 40 and 60 years, 16—above 60 years, 8. Born in the United States, 74—Ireland, 21—other places, 3.